Amendments to the Specification:

Please replace the Title of the invention beginning at page 1, line 1, with the following redlined Title:

~~COMPOSITIONS AND~~ METHODS FOR ELIMINATING UNDESIRED SUBPOPULATIONS OF T CELLS ~~IN PATIENTS WITH IMMUNOLOGICAL DEFECTS RELATED TO AUTOIMMUNITY AND ORGAN OR HEMATOPOIETIC STEM CELL TRANSPLANTATION~~

Please replace the paragraph beginning at page 22, line 14, with the following redlined paragraph:

In one embodiment, cells to be exposed to the pro-apoptotic or growth inhibiting compositions and/or sensitizing compositions are from the circulating blood of an individual and are obtained from one or more units of blood or from an apheresis or leukapheresis. The apheresis product typically contains lymphocytes, including T cells, monocytes, granulocytes, B cells, other nucleated white blood cells, red blood cells, and platelets. Prior to exposure to a sensitizing composition and subsequent activation and/or stimulation, a source of T cells is obtained from a subject. The term "subject" is intended to include living organisms in which an immune response can be elicited (*e.g.*, mammals). Examples of subjects include humans, dogs, cats, mice, rats, and transgenic species thereof. T cells can be obtained from a number of sources, including peripheral blood mononuclear cells, bone marrow, thymus, tissue biopsy, tumor, lymph node tissue, gut associated lymphoid tissue, mucosa associated lymphoid tissue, spleen tissue, or any other lymphoid tissue, and tumors. T cells can be obtained from T cell lines and from autologous or allogeneic sources. T cells may also be obtained from a xenogeneic source, for example, from mouse, rat, non-human primate, and pig. In certain embodiments of the present invention, T cells can be obtained from a unit of blood collected from a subject using any number of techniques known to the skilled artisan, such as ficoll separation. In one preferred embodiment, cells from the circulating blood of an individual are obtained by apheresis or leukapheresis. The apheresis product typically contains lymphocytes, including T cells, monocytes, granulocytes, B cells, other nucleated white blood cells, red blood cells, and

platelets. In one embodiment, the cells collected by apheresis may be washed to remove the plasma fraction and to place the cells in an appropriate buffer or media for subsequent processing steps. In one embodiment of the invention, the cells are washed with phosphate buffered saline (PBS). In an alternative embodiment, the wash solution lacks calcium and may lack magnesium or may lack many if not all divalent cations. As those of ordinary skill in the art would readily appreciate a washing step may be accomplished by methods known to those in the art, such as by using a semi-automated "flow-through" centrifuge (for example, the ~~Cobe~~ COBE® 2991 cell processor, Baxter) according to the manufacturer's instructions. After washing, the cells may be resuspended in a variety of biocompatible buffers, such as, for example, calcium (Ca)-free, magnesium (Mg)-free PBS. Alternatively, the undesirable components of the apheresis sample may be removed and the cells directly resuspended in culture media.

Please replace the paragraph beginning at page 67, line 27, with the following redlined paragraph:

In certain embodiments of the present invention, the cells of the present invention are administered to a patient following treatment with an agent such as chemotherapy, radiation, immunosuppressive agents, such as cyclosporine, azathioprine, methotrexate, mycophenolate, and FK506, antibodies, or other immunoablative agents such as CAMPATH®, anti-CD3 antibodies, cyclophosphamide, fludarabine, cyclosporine, FK506, rapamycin, mycophenolic acid, steroids, FR901228, and irradiation. These drugs inhibit either the calcium dependent phosphatase calcineurin (cyclosporine and FK506) or inhibit the p70S6 kinase that is important for growth factor induced signaling (rapamycin). (Liu et al., Cell 66:807-815, 1991; Henderson et al., Immun. 73:316-321, 1991; Bierer et al., Curr. Opin. Immun. 5:763-773, 1993; Isoniemi (supra)). In a further embodiment, the cell compositions of the present invention are administered to a patient with autoimmune disease following T cell ablative therapy using either chemotherapy agents such as, fludarabine, external-beam radiation therapy (XRT), cyclophosphamide, or antibodies such as OKT3 or CAMPATH®. In another embodiment, the cell compositions of the present invention are administered to a patient with autoimmune disease following B-cell ablative therapy such as agents that react with CD20, *e.g.* ~~Rituxan~~RITUXAN®.

The dosage of the above treatments to be administered to a patient will vary with the precise nature of the condition being treated and the recipient of the treatment. The scaling of dosages for human administration can be performed according to art-accepted practices. The dose for CAMPATH®, for example, will generally be in the range 1 to about 100 mg for an adult patient, usually administered daily for a period between 1 and 30 days. The preferred daily dose is 1 to 10 mg per day although in some instances larger doses of up to 40 mg per day may be used (described in U.S. Patent No. 6,120,766).